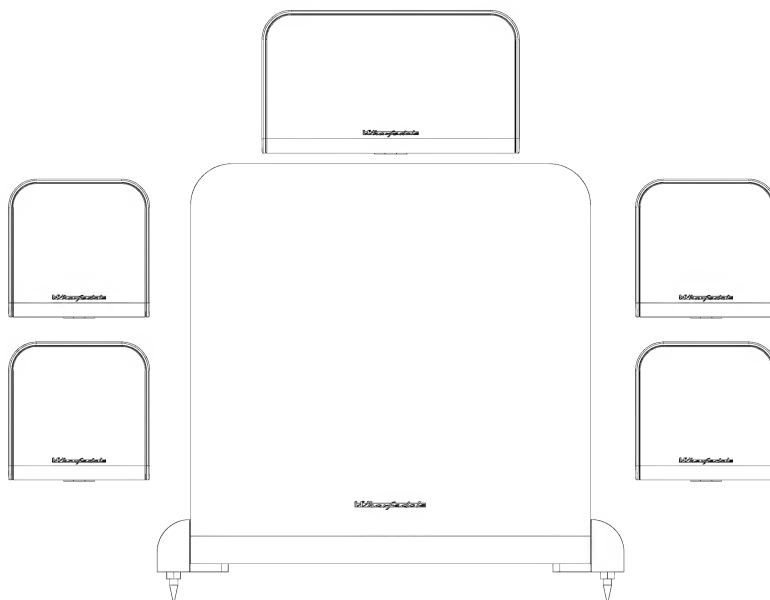


MS-100 HCP

5.1 AV SYSTEM

HOME CINEMA PACK



MS-100 Subwoofer
MS-100 Satellites
MS-100 Centre



Wharfedale
BRITAIN'S MOST FAMOUS LOUDSPEAKERS

User's Manual

IMPORTANT SAFETY INFORMATION

	CAUTION! RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-REMOVABLE PARTS INSIDE REFER SERVICING TO QUALIFIED PERSONNEL</p>		
<p>AVERTISSEMENT: RISQUE DE CHOC ELECTRIQUE- NE PAS OUVRIR</p>		



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

Read these instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Do not use this apparatus near water.

Clean only with dry cloth.

Do not block any ventilation openings.

Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wider blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Use only attachments/accessories specified by the manufacturer.



Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Warning: To reduce the risk of fire or electrical shock, do not expose this product to rain or moisture. The product must not be exposed to dripping and splashing and no object filled with liquids such as a vase of flowers should be placed on the product.

No naked flame sources such as candles should be placed on the product.

Caution: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this device.

Warning: The mains power switch for this appliance is located on the rear panel. To permit free access to this switch, the apparatus must be located in an open area without any obstructions.

Warning: The mains plug used as disconnect device, the disconnect device shall remain readily operable.

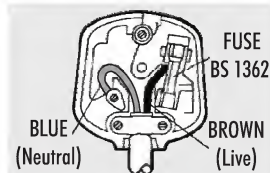
ESSENTIAL INFORMATION FOR UK USERS

The power cord on your subwoofer may be supplied with a plug incorporating a fuse, the value of which is indicated on the pin face of the plug. Should the fuse need to be replaced, an ASTA or BSI approved BS1362 fuse must be used of the same rating. If the plug is cut off it must NOT be re-used. Dispose of any such plug safely. There is a danger of electric shock if a cut-off plug is inserted into a mains socket.

The wires in the mains lead are coloured in accordance with the following code: Blue - Neutral: Brown - Live.

As the colours of the wires in the mains lead may not correspond with the markings identifying the terminals in the replacement mains plug, proceed as follows:

The wire coloured Blue must be connected to the terminal marked with the letter 'N' or coloured Black. The wire coloured Brown must be connected to the terminal marked with the letter 'L' or coloured Red.



Class II construction double insulated.
This product must not be connected to earth.

PRELIMINARIES



Before installing this product read all the instructions!

Before making any connections, switch all the units in your system off at the mains.

Make sure all connecting cables are safely routed. Do not run cables over unprotected floor areas, route them around room boundaries if necessary.

Set the volume control at minimum when you switch on your system or change sources, and turn the level up gradually.

DO NOT use your amplifier at full volume.

Ensure that all loudspeakers in the system are correctly wired.

DO NOT subject your loudspeakers to excessive cold, heat, humidity or sunlight.

DO NOT place heavy objects on top of loudspeakers.

DO NOT connect speaker terminals to the mains supply.

DO NOT dismantle the loudspeaker. There are no user serviceable parts inside it and you will void the warranty.

INTRODUCTION

The moviestar MS-100 system consists of:

- Four MS-100 satellite speakers
- One MS-100 centre channel speaker
- One MS-100 powered subwoofer

PRELIMINARIES

UNPACKING THE SPEAKERS

Carefully remove each loudspeaker from its packing carton. Be especially careful when removing the polythene bag. **DO NOT** attempt to lift the loudspeaker by the polythene bag.

When lifting the subwoofer from the carton, support it from the bottom. The unit is heavy; if you cannot manage it easily, get someone to assist you.

Check each unit and, in the event of damage, contact your dealer.

Retain the packing for future use. If you decide to dispose of the packing, please do so with regard to any recycling regulations in your area.

Retain the instructions. If you pass a product to a third party, please include the instructions.

ANCILLARY EQUIPMENT

The Moviestar MS-100 is compatible with most modern audio-visual equipment - but a loudspeaker is only as good as the signal it gets. Your amplifier should have ample reserves of power - a low powered amplifier could easily run out of steam and the resulting distortion is unpleasant to listen to and could damage your speakers.

A larger amplifier will usually sound better and enhance the reliability and performance of your loudspeakers. Always turn down the volume if the music starts to sound distorted.

INSTALLING THE SUBWOOFER

PRELIMINARIES

Open the carton and remove all the top packing pieces. Lift the subwoofer out taking care not to damage the cabinet. DO NOT lift the subwoofer out of the carton using the protective bag. The unit is heavy; if you cannot manage it easily, get assistance.

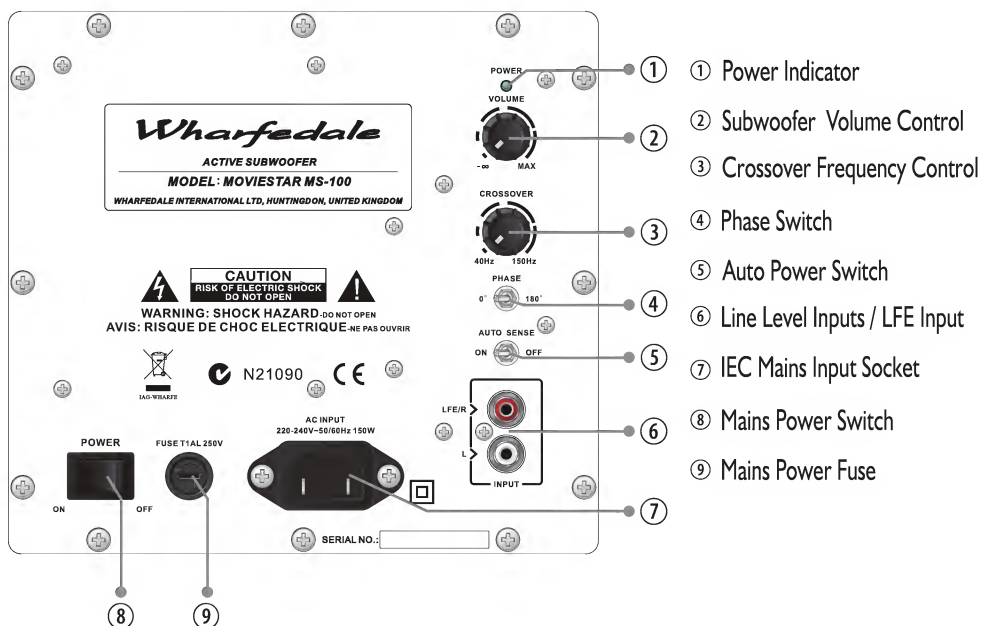
Retain the packing materials. If you decide not to keep the packing, please dispose of it having regard to any recycling regulations in your area. Please retain the user manual. If you transfer this equipment to a third party, please ensure all the instructions are passed on with the product.

POWER CONNECTIONS

This subwoofer is factory set to operate from the mains voltage marked on the amplifier panel. Before connecting check this voltage is correct for your mains supply.

If you move to an area with a different mains supply, consult your Wharfedale dealer for advice.

SUBWOOFER REAR PANEL CONNECTIONS

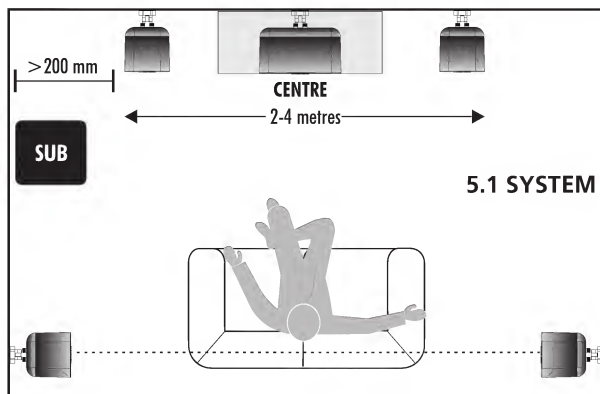


To connect the Subwoofer to a standard Digital Home Theatre Processor/Amplifier you should purchase a single RCA phono lead.

The cable should be a high quality unit and well screened to avoid hum and noise problems.

The lead should be long enough to reach the subwoofer without being stretched taut. Your Wharfedale dealer will be pleased to supply you with a suitable cable.

POSITIONING YOUR LOUDSPEAKERS



INSTALLATION

Before connecting your system consider where you will place the speakers in the room. Before making a final decision please experiment until you find the most suitable position.

5.1 POSITIONING

Mount the front speakers as shown. Angling the speakers inward slightly will improve stereo images but too extreme an angle will impair movie sound.

The centre speaker can be mounted above or below the TV screen.

All the passive speakers are screened and may be placed close to a conventional CRT TV.

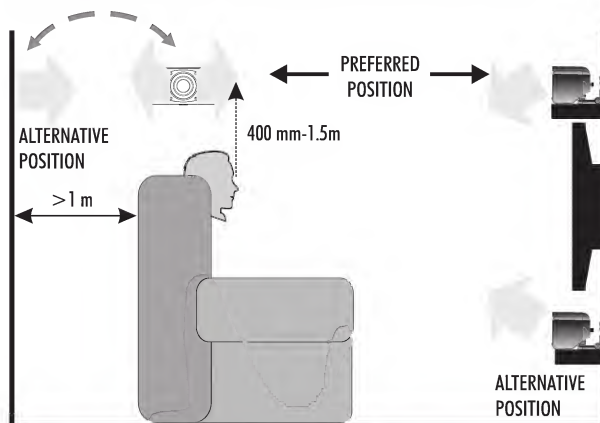
The surround speakers should be mounted 400mm and 1.5m above ear level and preferably on the side walls but always behind the listener. If the distance between the side walls is too great, you could use high stands to mount the surround loudspeakers.

If mounting the surrounds on the side walls is not feasible they may be mounted on the rear walls between 2.5-3.5 metres apart, central to the listening position and 400mm - 1.5m above ear level.

Place the subwoofer close to the wall, leaving just enough space to operate the controls and mains switch. Room positioning is not critical but we recommend that it is placed in front of the listening seat. Never operate the subwoofer within 450mm of a conventional TV. LCD and Plasma screens are unaffected. Ensure that there is a mains point close by.

The bass ports are rear mounted and moves a lot of air at high volume, so make sure the back wall is sound. The subwoofer is down-firing so do not place it above surfaces or objects that may rattle.

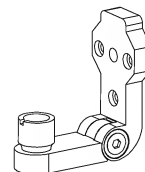
RECOMMENDED WALL MOUNTING POSITIONS



WALL BRACKET INSTALLATION GUIDE

If you are wall mounting the centre and effects loudspeakers we recommend that they be mounted on suitable shelves fixed to the wall.

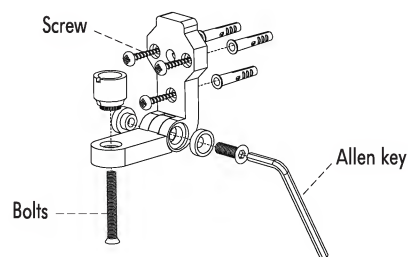
In the package you should find five pieces of plastic wall brackets fully assembled and mounting hardware as illustrated in Fig1.



* Fig 1

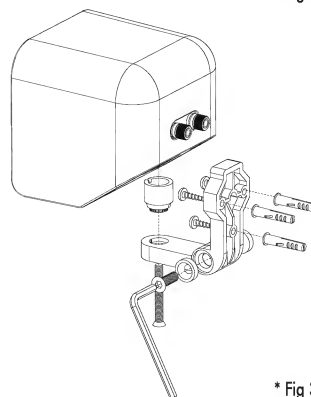
The three screws are used to secure the bracket to the wall via wall fittings. See Fig2.

Installation requires the aid of a qualified builder. It is recommended that the front satellites be approximately at ear level, the rear satellites be half a metre above ear level and the centre speaker closely above the TV set or flat panel display. Align the wall brackets duly.

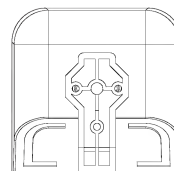
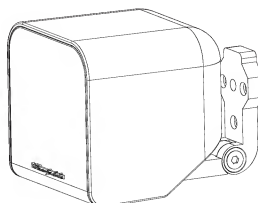
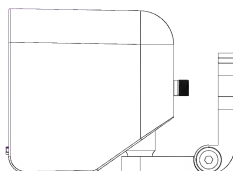


* Fig 2

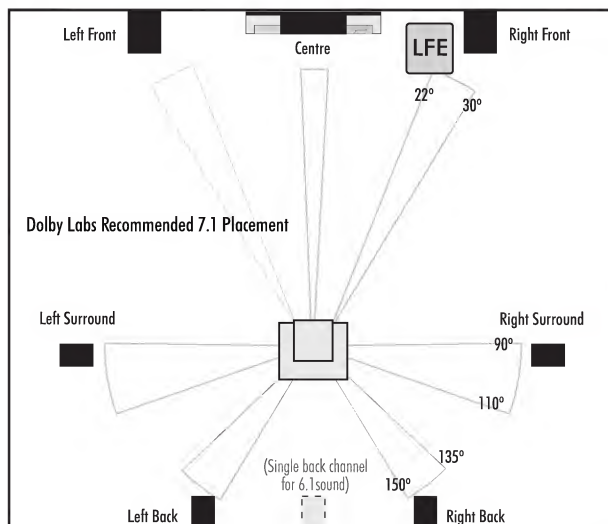
The bottom of each satellite and centre speaker is threaded, with a locating device to guide precise placement. Secure speaker to the wall bracket via an adaptor using the screw as shown in Fig 2 and 3. Tighten the retaining screw.



* Fig 3



MULTI-CHANNEL ROOM PLACEMENT



The diagram shows the Dolby Labs recommended positions for multi-channel operation.

For 5.1 channel operation use the satellites in the front and surround positions with the Subwoofer in the LFE position.

If you have a 7.1 channel processor/amplifier you can enhance the system further by buying one of the larger loudspeakers from the Wharfedale range to use as front channel speakers and use the satellite units as Back channels.

Your Wharfedale dealer will be pleased to advise you.

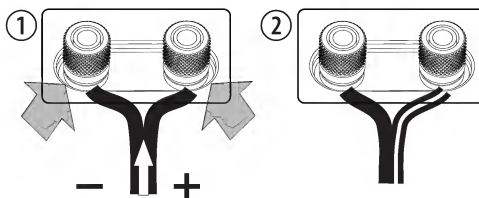
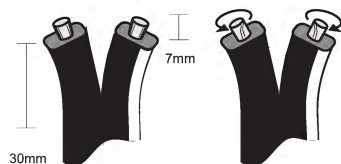
CONNECTING THE PASSIVE LOUDSPEAKERS

You will need to purchase a suitable length of loudspeaker cable. You are advised to buy quality loudspeaker cable rather than low-cost 'bell' or 'zip' wire. Your dealer will be pleased to advise you.

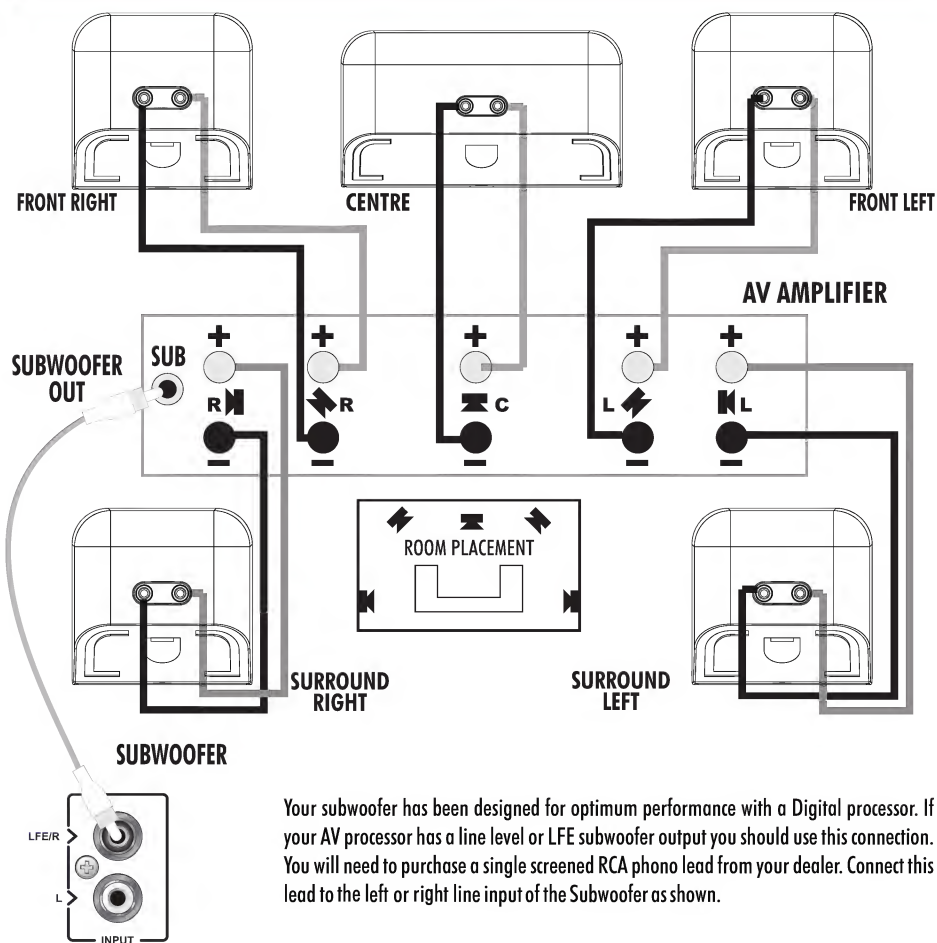
Connect the loudspeakers as shown in the connecting diagrams.

Ensure that the *red* speaker terminal is wired to the *red* (+) amplifier output terminal and that the *black* speaker terminal is wired to the *black* (-) amplifier output terminal.

It is convenient to use the striped core to connect the positive + RED terminals.



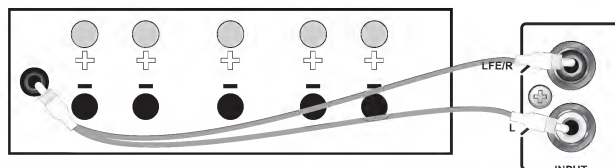
STANDARD SYSTEM CONNECTIONS



Your subwoofer has been designed for optimum performance with a Digital processor. If your AV processor has a line level or LFE subwoofer output you should use this connection. You will need to purchase a single screened RCA phono lead from your dealer. Connect this lead to the left or right line input of the Subwoofer as shown.

ALTERNATIVE SUBWOOFER CONNECTION

You may use a split mono lead from the processor to both inputs of the subwoofer. In this case the input level at the subwoofer will be slightly higher.



It is essential that you connect all the loudspeakers correctly with the Striped core connected to the Positive (+) terminals and the plain core connected to the Black (–) terminals in all cases. If one or more loudspeakers are incorrectly connected (out of phase), the definition will be poor and the bass will be indistinct.

OPERATION

SETTING UP THE SYSTEM

- Set the subwoofer power switch to OFF.
- Turn the system Volume Control to minimum.
- Re-check all system connections.
- Connect the supplied subwoofer power lead to the IEC power socket on the subwoofer and connect the mains plug into the wall socket.
- Set the subwoofer volume control midway (12 o'clock).
- Switch on the mains power.

FINE TUNING

Switch on the subwoofer power switch. Check that the power indicator on the cabinet glows. Now switch on the system. Play a programme with extended bass and set the system volume to a reasonable level. Adjust the subwoofer volume control to produce the desired level of bass.

PHASE SWITCH: If the bass is indistinct or lacks depth, the Phase switch may need adjustment. Set the switch to 0° and listen carefully to some music with extended bass. If there is insufficient bass output set the Phase switch to 180°. Select the position which produces the most natural, extended bass.

LOW PASS FILTER. This adjusts the blend between the subwoofer and the main speakers and enables you to set the system for optimum bass performance. The higher settings are for use with the supplied loudspeakers, the lower settings for large models. If you choose too low a setting with small speakers, there will be a 'hole' in the bass response; too high a setting with large speakers will result in the upper bass becoming bloated.

AUTO SWITCH. In normal mode the subwoofer is permanently on. This may result in low level hum or noise if the rest of the system is switched off and the subwoofer is left switched on. Setting the AUTO switch to ON automatically turns the subwoofer on when a signal is detected at any of the inputs and turns it off (Standby Mode) after a period of inactivity. We recommend the AUTO switch be set to ON for normal operation.

In AUTO mode the indicator on the subwoofer will always be illuminated even when in Standby to show the unit is still powered. If your subwoofer is disconnected from the mains or the Power switch is 'Off', the indicator will be extinguished. When the system is not in use for extended periods, we suggest you switch off the subwoofer to protect it from switching noises caused by domestic appliances, etc.

HOME THEATRE TOPICS

As the ear is unable to detect the direction from which deep bass originates, this allows freedom in positioning the subwoofer. Varying the distance from the wall alters the amount of bass. Some prefer to place the subwoofer against a room corner. This arrangement gives more bass at the possible expense of clarity.

LOUDSPEAKER SIZES

Many digital AV processors require you to specify the size of speakers in the various channels. These are usually 'Large' or 'Small'. We recommend that you set the front, centre and surround speakers to 'Small'. This will direct all the bass in the system to the subwoofer and provide clean, deep and louder bass.

Set the 'Subwoofer' option on the processor to 'On' or 'Yes'.

SETTING LEVELS

Once the loudspeaker settings have been finalised, put the AV amplifier into its 'Test' mode (see your processor instructions). Adjust the levels until all channels are equally loud.

You may need to adjust the subwoofer output level. Avoid setting too high a level or you will swamp the sound with bass which is tiring to listen to and may limit the subwoofer's ability to respond to large bass transients. Set a sensible level going into the subwoofer. The subwoofer volume control should be between 12 o'clock and 3 o'clock.

LFE

The Low Frequency Effects channel was designed as an additional bass channel with its own dedicated subwoofer. In practice however, if all the speakers are set to Small, the LFE channel will be combined with the bass from other channels and all this feeds into the subwoofer. When you set the LFE level from your AV processor, use care with this setting as the LFE channel may contain powerful low frequencies which, although normal in a cinema, may overload a domestic subwoofer.

If, during a programme, you hear popping or thumping noises coming from the subwoofer, immediately turn the AV Processor's volume level down and then reduce the LFE level. If this does not cure the problem, reduce the volume level at the subwoofer.

Please read the relevant sections of your AV amplifier manual and familiarise yourself with the various issues. If you are unsure, consult your dealer for help.

TROUBLESHOOTING *Before investigating a problem, always switch off the system at the mains.*

If your system is not working properly please work through this checklist before returning a unit to your dealer.

Symptom	Possible Cause
No Sound	System not switched on; Speaker cables shorting terminals out; Wrong source selected
Sound lacks bass content Bass reproduction indistinct	Front loudspeakers out of phase. Check all system connections and rectify. Subwoofer not switched on; Subwoofer phase incorrect; Subwoofer crossover control too low
Excessive bass distortion at low volumes	Subwoofer level set too high; LFE level set too high; Subwoofer incorrectly wired
Excessive or distorted bass at high levels	System level set too high; Bass control set too high; Speakers too close to room corners
Distorted / rattling sounds at high levels	System level too high; Objects on speakers/subwoofer; Objects too close to subwoofer
Popping or thumping from the subwoofer	System level set high; Subwoofer level set too high; LFE level set too high
Indistinct sound; Poor localisation of effects. Poor localisation of dialogue	One or more loudspeakers is out of phase. Check all system connections and rectify. (Read the manual for correct connection procedure)
Television picture colour is distorted	Subwoofer too close to TV. (Switch off system and TV. Move units away. Leave 15 mins. Switch on.)

SERVICE AND WARRANTY

CARE AND MAINTENANCE

If you play the speakers with the grilles off exercise great care. NEVER touch the drive units which are easily damaged.

The loudspeaker cabinets can be cleaned with a damp cloth or with a spray furniture polish and a soft cloth. Apply the spray very sparingly to the cloth and then polish the cabinet. Never apply spray directly to the cabinet.

GUARANTEE & SERVICE

In the unlikely event that your unit develops a fault you should return it to your Wharfedale dealer using the original packing to ensure safe shipping.

The terms of your guarantee may vary in different countries but in all cases the guarantee excludes:

All damage caused through accident, misuse, wear and tear, neglect, incorrect installation, adjustment or repair by unauthorised personnel. Liability for damage or loss occurring in transit to or from the purchaser.

Wharfedale will not be liable for any consequential damage, loss or injury, arising from or in conjunction with this equipment.

AUTHORISED SERVICE CENTRES

UK: IAG Service Centre, Unit 4, St Margaret's Way
Stukeley Meadows Industrial Estate, Huntingdon
Cambs, PE29 6EB, England
Tel: +44 (0)1480 452561
Fax: +44 (0)1480 13403

For information on other authorised service centres worldwide contact Wharfedale International in the U.K. A worldwide distributor list is available on the Wharfedale website: www.wharfedale.co.uk
Wharfedale has a policy of continuous product development and reserves the right to change specification without notice.

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SPECIFICATIONS

MS-100 Satellite

MS-100 Centre

Description	satellite speaker for AV	centre speaker for AV
Enclosure type	sealed box	sealed box
Transducer complement	75mm full-range driver	75mm full-range driver
AV shielded	NO	NO
Sensitivity (2.83V @ 1m)	88 dB	88 dB
Recommended amplifier power	15 - 50W	15 - 50W
Nominal impedance	4Ω	4Ω
Minimum impedance	3.6Ω	3.6Ω
Frequency response (+/-3dB)	130Hz ~ 20kHz	120Hz ~ 20kHz
Bass extension (-6dB)	120Hz	110Hz
Cabinet Volume	0.55L	1L
Dimensions (H×W×D)mm	98×100×107mm	98×176×107mm
Net weight	0.66kg(each)	0.81kg(each)
Standard accessories	wall brackets, rubber feet (for centre & bookshelf speaker), user manual	

MS-100 Subwoofer

Description	active subwoofer
Enclosure type	bass reflex
Transducer complement	200mm long throw bass driver
Input sensitivity	200mV for 75W
Rated power output	75W RMS
Peak power output	150 W
Peak SPL	108dB
Frequency response (+/-3dB)	35Hz ~ 200Hz
Crossover range	40-150Hz
Special features	phase inversion
(* List whichever is available.)	variable filter slope
	auto on/off
Cabinet Volume	16.4L
Dimensions (H×W×D)mm	315×340×310mm
Net weight	8.1kg(each)
Power requirements	AC 220-240V ~ 50/60Hz
	AC 100-120V ~ 50/60Hz
Standard accessories	power cord, spikes, user manual

*Design and specifications are subject to change without further notice.

Wharfedale

Wharfedale

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